

Patent
Avago Technologies Docket No.: 70030419-1

AMENDMENTS

Listing of Claims

The following listing of claims replaces all prior versions. Please amend the claims as follows:

1 Claims 1-3 (cancelled).

1 Claim 4 (currently amended): An optical source, comprising:
2 an optical emitter;
3 an encapsulant covering the optical emitter; and
4 a diffractive element integrated into the encapsulant, wherein the encapsulant
5 intercepts and passes light from the optical emitter to the diffractive element, wherein
6 the diffractive element diffracts the light to form a predesignated optical radiation
7 pattern and wherein the optical emitter is positioned at a conductive mounting site of a
8 conductive heat sink and the optical source is a surface mount device.

1 Claims 5-7 (cancelled).

1 Claim 8 (original): An optical source, comprising:
2 an optical emitter providing an optical signal; and
3 a diffractive element integrated into an encapsulant covering the optical emitter,
4 intercepting the provided optical signal and diffracting the optical signal to form a
5 predesignated optical radiation pattern.

1 Claim 9 (original): The optical source of claim 8 wherein the optical emitter is an LED.

1 Claim 10 (original): The optical source of claim 8 wherein at least one of the optical
2 emitter and the encapsulant includes a secondary emitter.

1 Claim 11 (original): The optical source of claim 8 wherein the diffractive element has

2 one of a binary grating profile, a sawtooth grating profile, a sinusoidal grating profile, a
3 multiple phase-level grating profile, and a binary subwavelength grating profile.

1 Claim 12 (original): The optical source of claim 8 wherein the encapsulant covering the
2 optical emitter encases the optical emitter.

1 Claim 13 (original): The optical source of claim 9 wherein the optical emitter is
2 positioned at a conductive mounting site of a conductive lead.

1 Claim 14 (original): The optical source of claim 11 wherein the optical emitter is
2 positioned at a conductive mounting site of a conductive lead.

1 Claim 15 (original): The optical source of claim 9 wherein the optical emitter is
2 positioned at a conductive mounting site of a conductive heat sink and the optical
3 source is a surface mount device.

1 Claim 16 (original): The optical source of claim 11 wherein the optical emitter is
2 positioned at a conductive mounting site of a conductive heat sink and the optical
3 source is a surface mount device.

1 Claim 17 (cancelled).

1 Claim 18 (cancelled).

1 Claim 19 (withdrawn): A method, comprising:
2 generating an optical signal with an optical emitter;
3 transmitting the optical signal through an encapsulant;
4 diffracting the optical signal transmitted through the encapsulant by a diffractive
5 element integral to the encapsulant to form a predesignated optical radiation pattern.

1 Claim 20 (withdrawn): The method of claim 19 wherein the diffractive element has one
2 of a binary grating profile, a sawtooth grating profile, a sinusoidal grating profile, a

3 multiple phase-level grating profile, and a binary subwavelength grating profile.